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IS : 4775 - 1976

Indian Standard
SPECIFICATION FOR
PICKING STICKS FOR AUTOMATIC
AND UNDERPICK LOOMS
(*First Revision*)

UDC 677.054.753



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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG,
NEW DELHI 110002

January 1977

AMENDMENT NO. 1 SEPTEMBER 1978

TO

IS:4775-1976 SPECIFICATION FOR PICKING
STICKS FOR AUTOMATIC AND
UNDERPICK LOOMS

(First Revision)

Alteration

(Page 3, clause 2.1) - Substitute the following for the existing clause:

'2.1 Material - The picking sticks shall be manufactured from compreg conforming to Type V of IS:3513(Part III)-1966[†].'

(TDC 19)

Reprography Unit, ISI, New Delhi

Indian Standard

SPECIFICATION FOR PICKING STICKS FOR AUTOMATIC AND UNDERPICK LOOMS

(*First Revision*)

Textile Mill Accessories (Other Than Jute) Sectional Committee, TDC 19

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Indian Standard
SPECIFICATION FOR
PICKING STICKS FOR AUTOMATIC
AND UNDERPICK LOOMS
(*First Revision*)

0. F O R E W O R D

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 8 November 1976, after the draft finalized by the Textile Mill Accessories (Other Than Jute) Sectional Committee had been approved by the Textile Division Council

0.2 This standard was first published in 1968 and covered picking sticks for underpick looms only. While revising this standard it was felt that since the requirements of picking sticks for automatic looms and underpick cotton, woollen and worsted looms are identical, the scope of this revision should be enlarged to include picking sticks for automatic looms also.

0.3 Since the dimensions and shape of picking sticks vary to a great extent depending upon the make of loom, this standard does not prescribe the dimensional requirements of picking sticks and, as such, permissible tolerances on various dimensions have been prescribed in this standard.

0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS:2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes requirements of picking sticks for use on automatic cotton looms and underpick cotton, woollen and worsted looms.

2. MANUFACTURE

2.1 Material — The picking sticks shall be manufactured from medium density compreg conforming to IS:3513 (Part III)-1966†.

*Rules for rounding off numerical values (*revised*).

†Specification for high and medium density wood-based laminates (compreg): Part III General purposes.

2.2 Finish — The picking sticks should have a smooth finish and may be given a coat of varnish if prescribed by the buyer.

2.3 Freedom From Defects — The picking sticks shall be free from checks, splits, blisters, overlaps, gaps and open joints or any other defect which is likely to affect the life or usefulness of the picking sticks.

3. REQUIREMENTS

3.1 Dimensions — The dimensions and shape of picking sticks shall be as prescribed by the buyer depending upon the make of the loom. Two typical sketches of picking sticks are shown in Fig. 1. The tolerances on various dimensions shall, however, be as follows:

<i>Dimensions</i>	<i>Tolerance, mm</i>
Overall length	± 3
Thickness and width	± 0.5
Height of the first hole from the bottom end	± 1
Diameter of holes	$+0$ -0.5
Distance between pair of holes	± 1

3.1.1 Warping — Warping to an extent of 1 mm per metre shall be permitted.

3.2 Mass — The mass of a picking stick shall be as agreed to between the buyer and the seller subject to a tolerance of ± 3 percent.

4. MARKING

4.1 Each picking stick shall be marked at a suitable place with the manufacturer's name, initials or trade-mark, if any.

4.1.1 Picking sticks may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

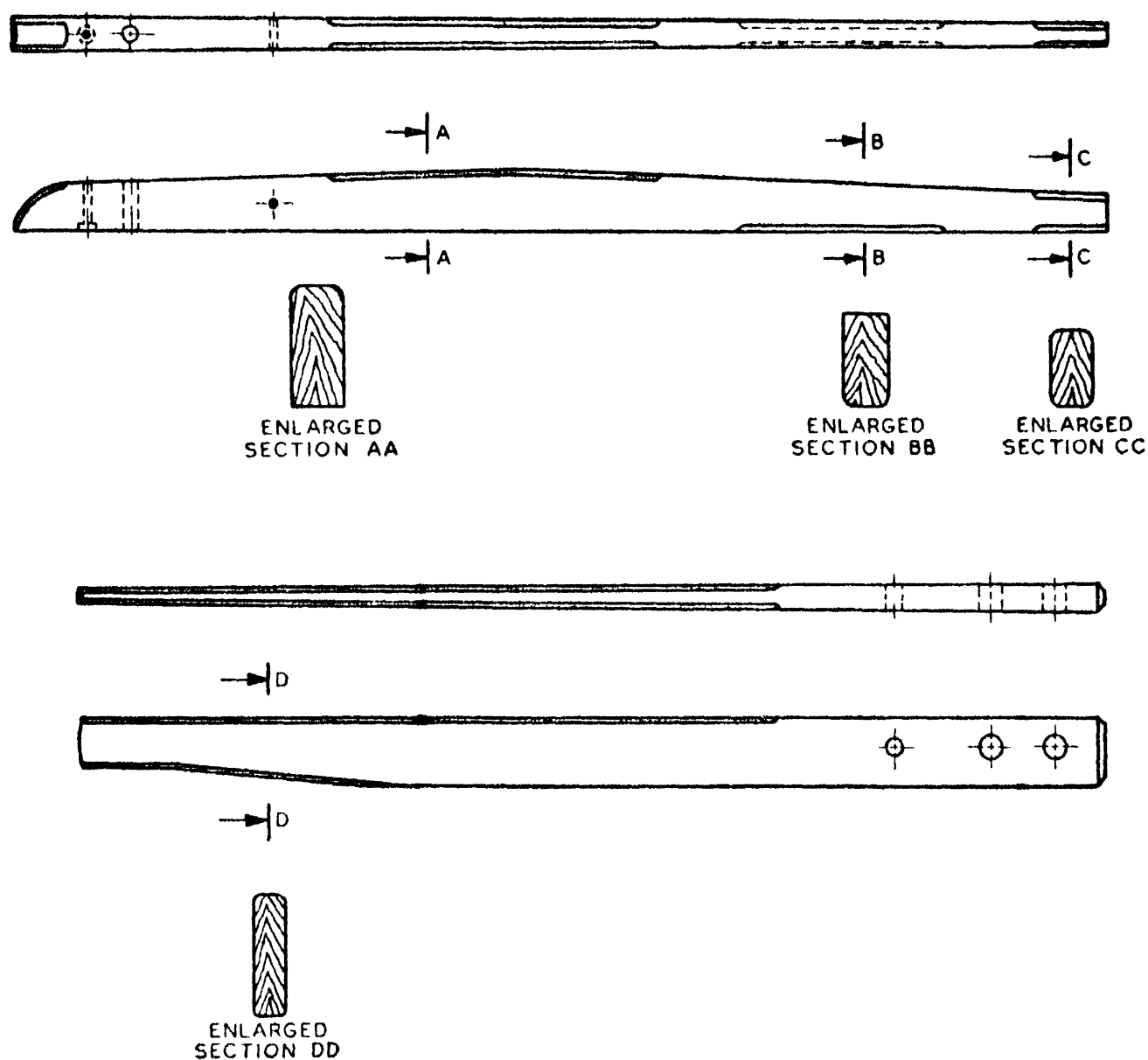


FIG. 1 TYPICAL PICKING STICKS

5. PACKING

5.1 A suitable number of picking sticks of one type shall be made into a bundle by tying at three places with twine. The number of picking sticks in a bundle shall be as agreed to between the buyer and the seller. Each bundle shall be packed in hessian.

5.2 Each bundle shall be marked with the following:

- a) Manufacturer's name, initials or trade-mark, if any;
- b) Number of picking sticks in the bundle; and
- c) Type of loom on which the picking sticks are to be used.

6. SAMPLING

6.1 All the picking sticks of one type and size and manufactured from the same raw material delivered to a buyer against a despatch note shall constitute a lot.

6.2 The conformity of the lot to the requirements of this standard shall be determined on the basis of the tests carried out on the samples selected from it.

6.3 Unless otherwise agreed to between the buyer and the seller, the number of picking sticks to be selected at random from a lot shall be in accordance with col 1, 2 and 4 of Table 1.

TABLE 1 SAMPLE SIZE AND CRITERION FOR CONFORMITY

LOT SIZE	NO. OF PICKING STICKS TO BE SELECTED FOR TESTING DIMENSIONS	PERMISSIBLE NO. OF NON-CONFORMING PICKING STICKS AMONGST THOSE SELECTED IN COL 2	NO. OF PICKING STICKS TO BE SELECTED FOR DETERMINING MASS FROM AMONGST THOSE SELECTED IN COL 2
(1)	(2)	(3)	(4)
Up to 150	13	1	3
151 „ 300	20	1	5
301 „ 500	32	2	8
501 „ 1 000	50	3	13
1 001 and above	80	5	20

6.4 The number of picking sticks to be tested and criterion for conformity for each of the characteristics shall be as follows:

<i>Characteristic</i>	<i>No. of Picking Sticks to be Tested</i>	<i>Criterion for Conformity</i>
Dimensions	See col 2 of Table 1	Non-conforming sticks not to exceed the corresponding number given in col 3 of Table 1
Mass	See col 4 of Table 1	Each observed value satisfies the requirements (see 3.2)



AMENDMENT NO. 2 AUGUST 1982
TO
IS : 4775-1976 SPECIFICATION FOR
PICKING STICKS FOR AUTOMATIC AND
UNDERPICK LOOMS

(*First Revision*)

Addenda

[*Page 3, clause 2.1 (see also Amendment No. 1)*] — Add the following new sentence at the end of the clause:

‘The species of timber given in Appendix A to the standard shall be used for the manufacture of veneers required for making compreg.’

(*Page 6, clause 6.4*) — Add the following new Appendix after 6.4:

‘ APPENDIX A

(*Clause 2.1*)

**SPECIES OF TIMBER TO BE USED FOR MANUFACTURE
OF VENEERS REQUIRED FOR MAKING COMPREG**

<i>Trade Name</i>	<i>Botanical Name</i>
Aini	Artocarpus hirsutus
Aniari	Amoora spp.
Arjun	Terminalia arjuna
Bahera	Terminalia bellirica
Carallia	Carallia brachiate
Chaplash	Artocarpus chaplasha
Chickrassy	Chukrasia velutina
Chilauni	Schima wallichii
Debdaru	Polyalthia spp.
Dilienia	Dillenia spp.
Gondsoroi	Cinnamomum cecicodaphne
Gurjan	Dipterocarpus spp.
Hathipaila	Pterospermum acerifolium
Hollock	Terminalia myriocarpa
Hollong	Dipterocarpus macrocarpus

<i>Trade Name</i>	<i>Botanical Name</i>
Jaman	Syzygium spp.
Jutili	Altingia excelsa
Kanju	Holoptelea integrifolia
Karani	Cullenia rosayroana
Kathal	Artocarpus heterophyllus
Kendu	Diospyros spp.
Kindal	Terminalia paniculata
Kokko	Albizia lebbek
Laurel	Terminalia alata
Maple	Acer spp.
Machilus	Machilus spp.
Makai	Shorea assamica
Mango	Mangifera spp.
Mullilam	Zanthoxylum rhetsa
Mundani	Acrocarpus fraxinifolius
Narikel	Pterygota alata
Nedunari	Mansonia spp.
Pali	Palaquium ellipticum
Piney	Kingiodendron pinnatum
Pitraj	Aphanamixis polystachya
Poon	Calophyllum spp.
Pussur	Xylocarpus spp.
Pymma	Lagerstroemia hypoleuca
Red Bombwe	Planchonia valida
Salai	Boswellia serrata
Satinwood	Chloroxylon swietenia
Silver Oak	Grevillea robusta
Toon	Toona cilata
Uriam	Bischofia javanica
Vellapine	Vateria indica
White Bombwe	Terminalia procera
White Chuglam	Terminalia bialata (Sapwood)

INDIAN STANDARDS

ON

TEXTILE MILL ACCESSORIES (OTHER THAN JUTE MILLS)

IS

1724-1971	Wooden warp bobbin for rabbit spindles (<i>second revision</i>)
1794-1971	Shuttles for plain calico looms (<i>first revision</i>)
1896-1970	Picking sticks for overpick cotton looms (<i>first revision</i>)
2058-1973	Shuttles for pirn changing automatic cotton looms (<i>first revision</i>)
2579-1963	Box back blanks for cotton looms
2623-1961	Blanks for sley caps for cotton looms
2624-1964	Boards for sley races for cotton looms
2625-1961	Blanks for sley bottoms for cotton looms
3265-1971	Warp pins (taper fit) for use in shuttles for plain calico looms (<i>first revision</i>)
3496-1966	Dobby jacks and pegs
3625-1971	Warp tubes for use on aluminium plug type spindles (<i>first revision</i>)
3833-1966	Flyer bobbins
3834-1966	Lease rods for cotton looms
4187-1967	Skewers for use on cotton speed frames
4416-1967	Dobby burlles
4417-1971	Warp pins for shuttles for pirn changing automatic cotton, woollen and worsted looms (<i>first revision</i>)
4775-1976	Picking sticks for automatic and underpick looms (<i>first revision</i>)
4888-1975	Paper cones for winding yarn (<i>first revision</i>)
5141-1969	Wooden cones for winding yarn
5473-1969	Double flanged bobbins used in woollen and worsted mills
5492-1969	Pirns for woollen and worsted plain looms
6268-1971	Accessories for use in shuttles for plain calico looms
7614-1975	Wooden bobbins for ring doubling and twisting frames

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